Savannah River Site Citizens Advisory Board (CAB)



ANNUAL WORK PLAN

Covering the Period of June 1, 2000 to June 1, 2001

June 2, 2000

INTRODUCTION

The Savannah River Site (SRS) Citizens Advisory Board (CAB) is composed of 25 individuals from South Carolina and Georgia. Originally chosen by an independent panel of citizens from approximately 250 applicants, the board members reflect the diversity of the population affected by SRS. The members, who can serve up to three consecutive two-year terms, represent business, academia, labor, local government, environmentalists, special interest groups, and the general public. Two of the members specifically represent economically disadvantaged persons.

The Board is sponsored by the U.S. Department of Energy Office of Environmental Management and is chartered under the Federal Advisory Committee Act. The CAB provides advice and recommendations to the Department of Energy (DOE), the Environmental Protection Agency (EPA) Region IV, and the South Carolina Department of Health and Environmental Control (SCDHEC) on environmental restoration, waste management and related issues. The CAB uses issues-based Committees to focus on various topics. These issues-based Committees may form working groups or public focus groups to concentrate on a specific issue. The four issues-based Committees of the CAB are:

- Strategic and Long Term Issues
- Waste Management
- Environmental Remediation
- Nuclear Materials

Although there are a wide variety of issues of interest to the CAB, it is limited by time and resources. The purpose of this Work Plan is to establish priority issues for each of the Committees, and therefore, for the CAB. It allows all Board members to be involved in setting the direction of the CAB, even for the Committees of which they are not members. It allows the CAB to prioritize resource expenditures (people and dollars), and also control the establishment of focus and working groups.

The Work Plan covers two, six-month periods. The near-term period (June 1, 2000 to December 1, 2000) has three high-priority issues and three other issues identified for each Committee. The high-priority issues are the primary items of focus for the Committee. The out-term period (December 1, 2000 to June 1, 2001) has three issues identified for longer range planning purposes. The Work Plan will be updated again in six months, with the identification of three high priority issues and three other issues for the period of December 1, 2000 to June 1, 2001; and three longer-term issues for the period of June 1, 2001 to December 1, 2001. This update process will be repeated every six months.

The Committee chairs will structure their activities to focus first on the high-priority items, and then on the other three items. It is understood that other issues may present themselves, resulting in deviation from the Work Plan. Deviating from the Work Plan is at the discretion of the Committee Chairs, however, they should inform the CAB when this is required.

STRATEGIC AND LONG TERM ISSUES COMMITTEE

Description of the Committee

This committee is involved in long-term policy, planning and other strategic matters, including issues that "cross cut" the work of other CAB committees. Its work includes many programmatic topics.

Some specific areas of interest are development and deployment of technology, the SRS budget decision-making process, long-term stewardship; future land use, facility disposition and relevant national environmental policy.

Top Three Priority Items from June 1, 2000 to December 1, 2000

<u>Budget Review</u>. The committee believes that the budget integrated priority list is an important item for consideration. Reviews of both current spending and future budgets will receive attention. During review of the budget, budget deferral items and issues related to the work of other committees will be communicated to these committees.

<u>Strategic Plan/Comprehensive Plan</u>. These two plans are up-dated every two to three years, but there are continuing discussions on matters that are related to these plans. These plans set the mission and vision for the site. Drafts of these plans are reviewed and comments sent to DOE prior to approval of the plans. The CAB receives periodic updates related to the implementation of these plans.

Stewardship. The CAB and the general public are very interested in what will happen to the site and the land under the jurisdiction of DOE. The committee works to ensure that the DOE takes a serious view of protection of the site for future generations and for the ecology of the site. Of primary interest to the committee during this period will be the DOE-HQ long-term stewardship study to be issued late this year. The committee is also committed to following complex-wide initiatives related to stewardship, especially with some sites closing by the year 2006. A request will be made for Mr. Jim Werner, DOE-HQ, Director, Office of Long-Term Stewardship, to attend the committee meeting in July to discuss the long-term stewardship study.

Three Additional Items from June 1, 2000 to December 1, 2000

<u>Facility Disposition</u>. As facilities at the site become inactive, the committee is concerned that hazards/risks related to these facilities be properly managed. In addition, inactive facilities and equipment can be used elsewhere or sold. Site surveillance and maintenance cost reductions can be obtained by disposition of facilities. Money saved through this process can be allocated for

use by deferred budget items. Facility disposition is part of the long-term stewardship activity.

National Environmental Policy Act (NEPA). The NEPA process allows the public to participate and to better understand projects and issues through Environmental Assessments (EAs) and Environmental Impact Statements (EISs). The public can participate in and affect DOE decisions by being knowledgeable about the NEPA process. The committee is concerned that current turn around time is often too short for some NEPA matters. It will try to ensure that a continuous effort is made to monitor NEPA activities. The committee will receive NEPA status reports as well as following activities in the Environmental Bulletins. Other CAB committees will be notified when NEPA activities fall into their areas of interest.

<u>Technology Development</u>. In order to reduce costs and find new methods for environmental clean up, new technology must be continually developed and deployed. The committee will concentrate on relevant new technology developments as well as the relationship of the budget to technology development. Technology deployment will be reviewed for both on-site activities and for making the technology available for private license.

Items to Consider from December 1, 2000 to June 1, 2001 (next planning cycle)

Because many committee responsibilities consist of on-going programmatic activities, the Strategic and Long-term Issues Committee believes that the priorities and other issues mentioned above will be included in the next planning period.

Other Issues

The CAB formed a risk management working group in May, 1998. This working group was originally made up of four teams. Only one team remains. This is Team A with the title of Risk Analysis. This team has continued to function. It intends to make its final presentation to the Strategic and Long-term Issues Committee in August, 2000, and a presentation to the full CAB at the September meeting. Upon completion of the presentation to the CAB, the working group will probably disband and appropriate activities will be absorbed by one or more CAB committees.

WASTE MANAGEMENT COMMITTEE

Description of the Committee

With a goal of reducing the highest risks to the public, workers and the environment, this Committee addresses the treatment, storage and disposal of various waste streams, including transuranic waste (TRU), low-level waste (LLW), mixed-low-level waste (MLLW) and high level waste (HLW). The Committee also addresses issues related to transportation of waste and Environmental Management Integration (EMI), exclusive of nuclear materials integration.

Top Three Priority Items from June 1, 2000 to December 1, 2000

<u>Alternative Salt Disposition</u>. DOE continues to support public participation in identification of alternatives for Salt Processing. Updates to the CAB on project design and implementation schedules and impacts of those schedules, the technology selection date, the preparation of the SEIS, and risks and benefits of the selected technology will be provided periodically to the Committee and the Salt Processing Public Focus Group.

Consolidated Incineration Facility (CIF). DOE has completed the CIF closure campaign and will begin to clean radioactivity from the plant. The Committee is concerned about the decision to suspend CIF operations and shut down the facility despite the continuing need to dispose of the PUREX waste stream. Additionally there is a concern that the State will not reissue an operating permit for CIF if DOE should decide to restart it. The Committee is concerned that suspending operations at CIF is neither cost-effective nor the right thing to do.

<u>Tank Closure</u>. The Committee will continue to follow the cleanup and closure of High Level Waste Tanks. DOE will be requested to provide continuous updates on the Tank Closure Environmental Impact Statement (EIS) progression, tank closure activities, Nuclear Regulatory Commission (NRC) Incidental Waste Ruling, and Tank 19 closure activities as needed.

Three Additional Items from June 1, 2000 to December 1, 2000

<u>Glass Waste Storage Building</u>. The Committee is interested in the impacts of building and operating an onsite aboveground storage facility for vitrified high level waste using casks manufactured from depleted uranium oxide now stored on site.

<u>HLW Evaporator</u>. The Committee is interested in the safety and reliability of the evaporators used to reduce the volume of high level waste volume by boiling off excess water. Evaporators have been used in the tank farms since the early 1960s. Three evaporators are currently in use, and two others have been retired. One of the three operating evaporators (the 2H) is shutdown because of severe internal contamination. Presently, DWPF recycle waste is being routed to the

Type IV tanks for temporary storage. The Type IV tanks can accommodate this waste stream for about one year. By that time, the 2H Evaporator needs to be cleaned and repaired in order to process this backlog of waste.

<u>Transportation</u>. DOE will be seeking input in an Environmental Assessment (EA) in spring 2000 to analyze the potential environmental consequences associated with shipping LLW and MLLW to Texas, Tennessee, Washington and Utah for disposal. In light of past CAB recommendations regarding the disposal of LLW/MLLW, this EA will be of significant interest because protocols to make the shipments will need to be developed. This will provide the Committee and the CAB with the opportunity to be involved early on in the process.

Items to Consider from December 1, 2000 to June 1, 2001 (next planning cycle)

Transuranic & Pu–238 Waste. The Committee will continue to follow the shipment of TRU waste to the Waste Isolation Pilot Project (WIPP). SRS has the third largest inventory of DOE TRU waste. Excess heat generated by the Pu-238 prevents transport to WIPP. Until a shipping container is licensed to carry Pu-238, this material can not leave SRS. The Committee will continue to work with DOE to resolve this transportation issue and will follow the construction and operation of a TRU Waste Certification Facility and implementation of the WIPP Resource Conservation and Recovery (RCRA) Permit.

MLLW/LLW Shipments. As a result of the Waste Management Programmatic Environmental Impact Statement Record of Decision (WM PEIS ROD), shipments of SRS orphan waste to Nevada and Hanford will be scheduled. In addition, LLW not meeting E-Area Waste Acceptance Criteria will be shipped to the Nevada Test Site. Schedules need to be developed and the environmental impacts reviewed; therefore, this issue will remain a priority for the CAB.

<u>232-F H3 Conservatism of the Performance Assessments/Composite Analysis</u>. Assumptions this waste cannot be disposed at SRS are too conservative. The Waste Management Committee believes there will be a need for the CAB to discuss with DOE any alternatives under consideration for disposal of this waste.

Other Issues

The Waste Management Committee is currently being supported by the Salt Processing Public Focus Group. It is anticipated that this focus group will remain in operation through the selection process.

ENVIRONMENTAL REMEDIATION

Description of the Committee

This Committee addresses the remediation of contaminated areas at SRS including various types of waste units, groundwater and surface water contamination. Included under this Committee are issues related to the Federal Facility Agreement (FFA) and risk management as it pertains to environmental restoration.

Top Three Priority Items from June 1, 2000 to December 1, 2000

Total Maximum Daily Loads (TMDLs). TMDLs are required by the Clean Water Act, and EPA is requiring that the states prioritize surface waters based upon how well they meet water quality standards. At SRS, the issue is the Mercury TMDL. EPA published a Proposed Rule on February 8, 2000 and the public comment period closed on April 10, 2000. The TMDL for SRS becomes effective on June 7, 2000 unless EPA can obtain an extension from the court. This is in response to the Sierra Club lawsuit filed against the state of Georgia. SRS will be required to measure mercury at very low concentrations and cleanup to these very low concentrations. It will cost millions to comply (analyses, wastewater treatment plant construction, etc.), and there will be little or no benefit to the environment since most mercury in surface waters is from air deposition.

Outfalls A-01, A-11, X-08. EPA requires biological testing to determine toxicity of wastewater discharges to surface waters. Toxicity testing started at SRS in 1995 at the Central Sanitary Plant. SRS experienced National Pollutant Discharge Elimination System (NPDES) permit exceedences in 1997 - 1998; several were toxicity testing failures. SRS reported the high level of NPDES permit exceedances to SCDHEC and because no agreement was reached with SCDHEC on toxicity testing the issue was referred to EPA. EPA has enforcement action under review and a program is underway to solve this.

Old Radioactive Waste Burial Ground (ORWBG) Focus Group. Discussion on pending issues, updates from the group on its activities, focus group closure plan, ISPR status, etc.

Three Additional Items from June 1, 2000 to December 1, 2000

<u>RCRA – GPRA</u>. The Government Performance and Results Act (GPRA) was enacted in 1993 and requires federal agencies to establish standards measuring their performance and effectiveness. The EPA, who has delegated it to SCDHEC, is required to perform an environmental indicator study at each RCRA Facility for Groundwater and Human Health. It was determined that SRS had uncontrolled releases in the Groundwater, thus, something must be

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done and the requirement is to have it under control by 2005. This is a new issue and the Committee is interested in being briefed on the impact of this on SRS cleanup activities. Steel Creek Integrator Operable Unit (IOU). The CAB issued two recommendations on the SRS Integrator Operable Units (IOU) Program. Continued involvement by the Committee to follow-up to these recommendations will include activities such as reviewing the workplans and providing comments to EPA, SCDHEC, and SRS within the designated review/comment period and providing additional guidance and evaluation of the IOU Program as necessary.

TNX Operable Unit. EPA has indicated that a Feasibility Study will be available for review in this time frame. This portion of TNX is the portion that is "up on the bluff" and consists of the New TNX Seepage Basin, Old TNX Seepage Basin, TNX Burying Ground, and TNX Groundwater. The SRS will provide a briefing and scope the CMS/FS with the Committee to solicit their input on the identification of the potential remedial actions that should be evaluated.

Items to Consider from December 1, 2000 to June 1, 2001 (next planning cycle)

<u>Reactor Areas Groundwater</u>. The Committee requested, at its October 1999 meeting, a briefing on the Reactor Areas Groundwater, to better understand the impact of the Reactor Seepage Basins that are addressed in the Plug-In ROD. Although this briefing was originally planned for early 2000 several other more pressing issues caused it to be bumped from the agendas. The SRS will provide this briefing as soon as the CAB ER Committee identifies an appropriate time on their schedule.

<u>TNX Outfall Delta, Lower Discharge Gully, and Swamp</u>. As the name indicates, this is the portion of the TNX that is ""below the bluff". This project is currently in the middle of the investigation phase, where the nature and extent of the contamination is being determined. The next phase will be the development of the CMS/FS and the SRS will provide a briefing and scope the CMS/FS with the CAB to solicit their input on the identification of the potential remedial actions that should be evaluated.

<u>Phytoremediation</u>. As DOE investigates and deploys cost effective natural and passive remedial approaches such as Phytoremediation, the Committee is interested in providing input to ensure effective implementation and long-term benefits.

Other Issues

The Environmental Restoration Committee is currently being supported by the Old Radioactive Waste Burial Ground Public Focus Group. It is anticipated that this focus group will remain in operation supporting the Committee.

NUCLEAR MATERIALS

Description of the Committee

This committee was established to study issues that involve nuclear materials (generally uranium and plutonium) that have an impact on present or future SRS activities, including spent nuclear fuel program activities, nuclear materials management, and nuclear materials integration.

Top Three Priority Items from June 1, 2000 to December 1, 2000

DNFSB Recommendation 2000-1 and 94-1 and DOE's Implementation Plan Response. The Defense Nuclear Facilities Safety Board (DNFSB) issued a strongly worded recommendation in January 2000 expressing concern that several nuclear material stabilization milestones identified in its 94-1 Recommendation have not been completed. Many of the facilities and nuclear materials referenced in the recommendation are at SRS. The 2000-1 recommendation suggested that DOE inform Congress and the President of the uncompleted milestones and the lack of funding to complete them. DOE will develop a revised 94-1/2000-1 Implementation Plan to outline how SRS will accomplish its commitments. The CAB will closely follow the progress of the activities.

Long Term Nuclear Materials Storage Facility. DOE committed to providing updates on plans to replace the Actinide Storage and Packaging Facility, one of which now includes a 235-F/KAMS proposal. Also, SRS has completed renovations to K Area (KAMS) for temporary storage of the plutonium from Rocky Flats. In its 2000-1 recommendation, the DNFSB noted its concerns that DOE has yet to specify how long term storage of materials will be managed. Storage capability will also impact surplus plutonium disposition activities.

Integrated Nuclear Materials Stewardship Plan. Congress requested that DOE provide an integrated look at how it would stabilize and dispose of nuclear materials located through the DOE complex. The CAB has carefully followed DOE's work on integrating nuclear materials and storage around the complex and could play an important role in stakeholder acceptance of integration. Once the report is released, the Committee will focus on SRS specific responsibilities and will note materials coming to and leaving the site.

Three Additional Items from June 1, 2000 to December 1, 2000

Melt and Dilute Technology Pilot Project. DOE announced melt and dilute as its preferred alternative to treat SRS Spent Nuclear Fuel in the final environmental impact statement. This technology has yet to be proven on a large test scale. Because of uncertainties, the CAB and the DNFSB have asked that DOE keep processing capabilities available until the technology is

proven. The Committee will follow the progress of the technology closely and watch to ensure canyons remain as a backup if necessary.

External Oversight of DOE Facilities. Three pilot projects at different DOE facilities (including the Receiving Basin for Offsite Fuels at SRS) were conducted to access the viability of having Nuclear Regulatory Commission (NRC) oversight of DOE facilities. Currently DOE self regulates its nuclear facilities. Although two separate reports were issued, one by DOE and one by NRC, Secretary of Energy Bill Richardson basically put a halt to such oversight because he opposed the concept. The issue is now being revisited by the House Commerce Committee due to concerns of safety as a result of the newly created National Nuclear Security Administration.

Surplus Fissile Materials Nonproliferation and Disposition Activities. These activities include constructing and operating Pit Disassembly and Conversion, Immobilization and Mixed Oxide Fuel (MOX) Fabrication facilities to dispose of surplus plutonium in support of international nonproliferation efforts. Many opportunities for public involvement remain, through comment on NEPA environmental reports for some facilities and licensing of reactors to burn MOX fuel. Uranium activities fall under the DNFSB recommendations to stabilize Highly Enriched Uranium (HEU) solutions, in which a contract is pending to blend it down to low enriched uranium and give to the Tennessee Valley Authority for nuclear power reactor fuel. Other excess uranium (at SRS and other DOE sites) will be addressed through the Nuclear Material Integration Stewardship Plan. SRS will likely play a role in disposition of some of the material.

Items to Consider from December 1, 2000 to June 1, 2001 (next planning cycle)

The topics for 2000 will basically be revisited in 2001 because they are long-term, with individual complex issues imbedded in each. Concerning the DNFSB commitments, the Committee will follow the progress of DOE activities-- including long-term storage activities--to meet the commitments made in response to the 94-1 and 2000-1 recommendations. As another example, the Committee will initially hear DOE's proposal to integrate nuclear material stabilization throughout the DOE complex, then concentrate on specific recommendations potentially affecting SRS. In the Surplus Fissile Materials arena, opportunities for additional public involvement in the NEPA and NRC licensing arenas will become available.

Other Issues

There are no other issues for the Nuclear Materials Committee.

Summary Listing of High Priority CAB Issues for June 1, 2000 to December 1, 2000 (In no particular order)

- Budget Review
- Strategic Plan/Comprehensive Plan
- Stewardship
- Alternative Salt Disposition
- Consolidated Incinerator Facility
- Tank Closure
- Total Maximum Daily Loads (TMDLs)
- Outfalls A-01, A-11 and X-08
- Old Radioactive Waste Burial Ground (ORWBG)
- DNFSB Recommendation 2000-1 and 94-1
- Long Term Nuclear Materials Storage Facility
- Integrated Nuclear Materials Stewardship Plan